

## Shortest Path

Road courses are measured along the shortest path a runner could take while remaining on the designated course. Generally that means staying on the paved part of a roadway – not the sidewalk, not cutting across a lawn, not running through a corner parking lot but taking the tangent on the roadway. The road course certification process is quite complex. You can read the Canadian version of the process, including a list of certified courses. <http://coursemeasurement.ca/> The main thing to understand is that the course is measured along the shortest path and to run anywhere else means you are running farther than the race distance.

Many runners lose considerable time by not paying attention to the shortest path. Watch any race and you will see people following the centre line around S-curves or staying on one side of the road between successive left-right turns.



Taking the course from the lower left to the upper right on this road via the shortest path saves about 7.5% over remaining on the right side of the road. You can see that several corners like these can add considerably to the length of your race if you do not optimize your route.

Here is an interview with Rod Dixon about his New York City marathon win. What to notice here is about 2 minutes into the video he talks about running the tangents. A very good lesson: <http://www.youtube.com/watch?v=llfcZUyTJGA&feature=related>

It is not always possible or practical to take the shortest path. Crowded conditions, bad footing, the location of the water tables and road camber may affect the route you take but in general, taking the shortest path is the best way to go.

You can give yourself the best chance of running the shortest path by knowing the course – study the map or drive the route before the race so you know what is coming up. Watch ahead to see which way the pack is going. If you have the chance, position yourself accordingly. Learn to take water with either hand so you do not have to go back and forth across the road for fluids.

When lining up at the start, be aware of the direction of the first corner. If it is practical, line up to give yourself the shortest line to that corner.

If you are racing on a track, the same thing applies. You do not want to be running farther than necessary. Learn to run close to the curb. It is amazing to see how many people run nearly into the second lane when there is no reason for it. On a curved start line or when cutting in from a lane start, look at the far bend on the track and take a straight line to it in order to run the shortest path.

As with everything, it is best if you can practise the shortest path during training runs. This is rarely possible because you are usually sharing the roads and paths with vehicles, bikes and other people. You can pay attention, however. Decide what route you would take if this was a race. By being aware of the concept you have a better chance of bringing the skill to your race.

The shortest path is one way of maximizing your performance with a minimum of effort.

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*[www.runninggoals.ca](http://www.runninggoals.ca)*